



WEB TECHNOLOGIES

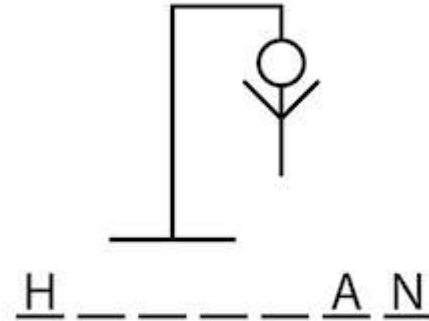
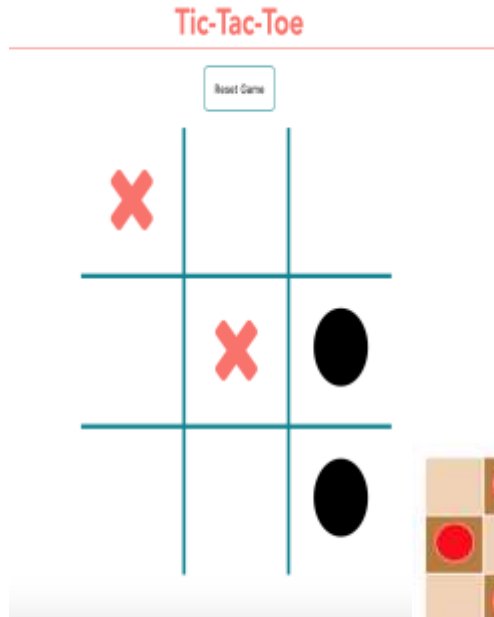
Document Object Model

Vinay Joshi

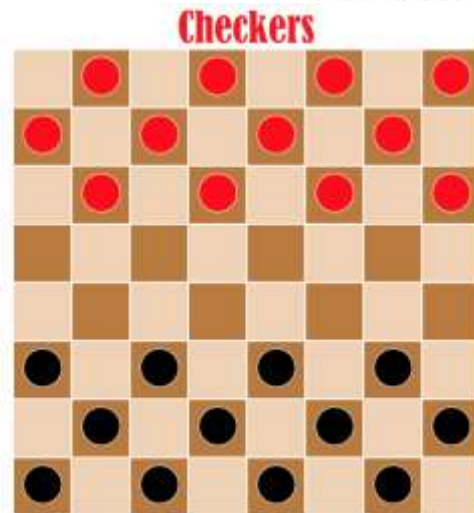
Department of
Computer Science and Engineering

Document Object Model

How does JavaScript interact with HTML / CSS?



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My shopping list

Enter a new item:

- Eggs
- Milk
- Bread
- Humous

Document Object Model

Drawbacks of using document.write()

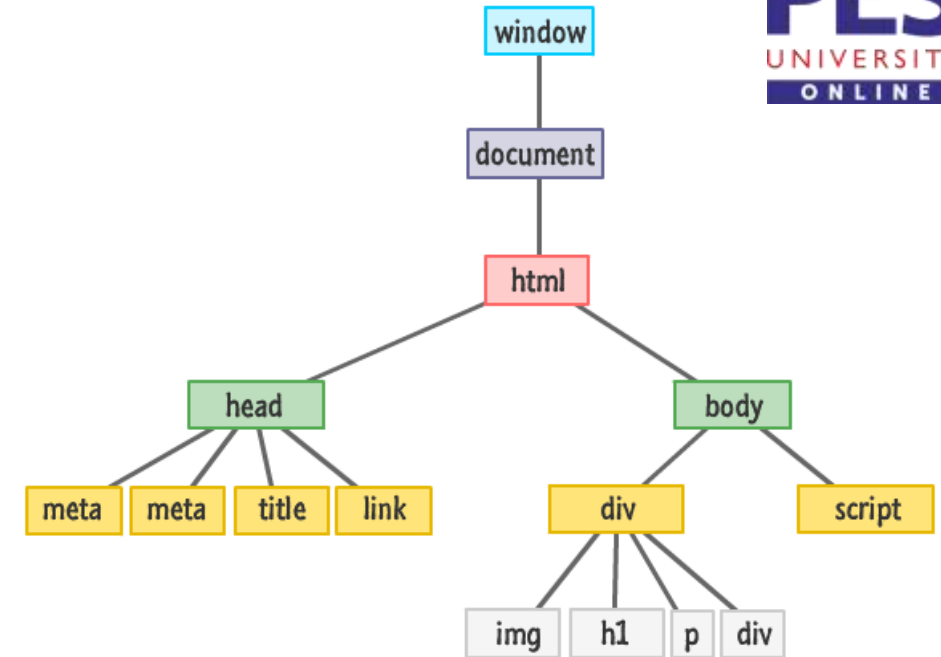
- Document.write executed after the page has finished loading will overwrite the page, or write a new page, or not work
- Document.write practically only appending to the page



Document Object Model

Introduction to DOM

- A Web page is a document. This document can be either displayed in the browser window or as the HTML source. But it is the same document in both cases.
- The DOM is an object-oriented representation of the web page, which can be modified with a scripting language such as JavaScript.



Document Object Model

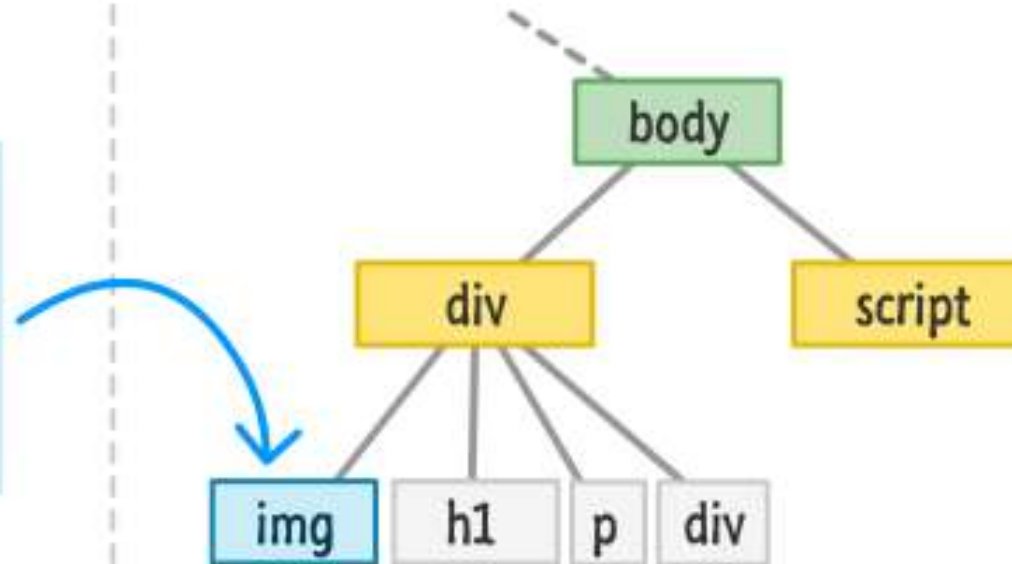
DOM Elements are Objects

HTML

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DOM



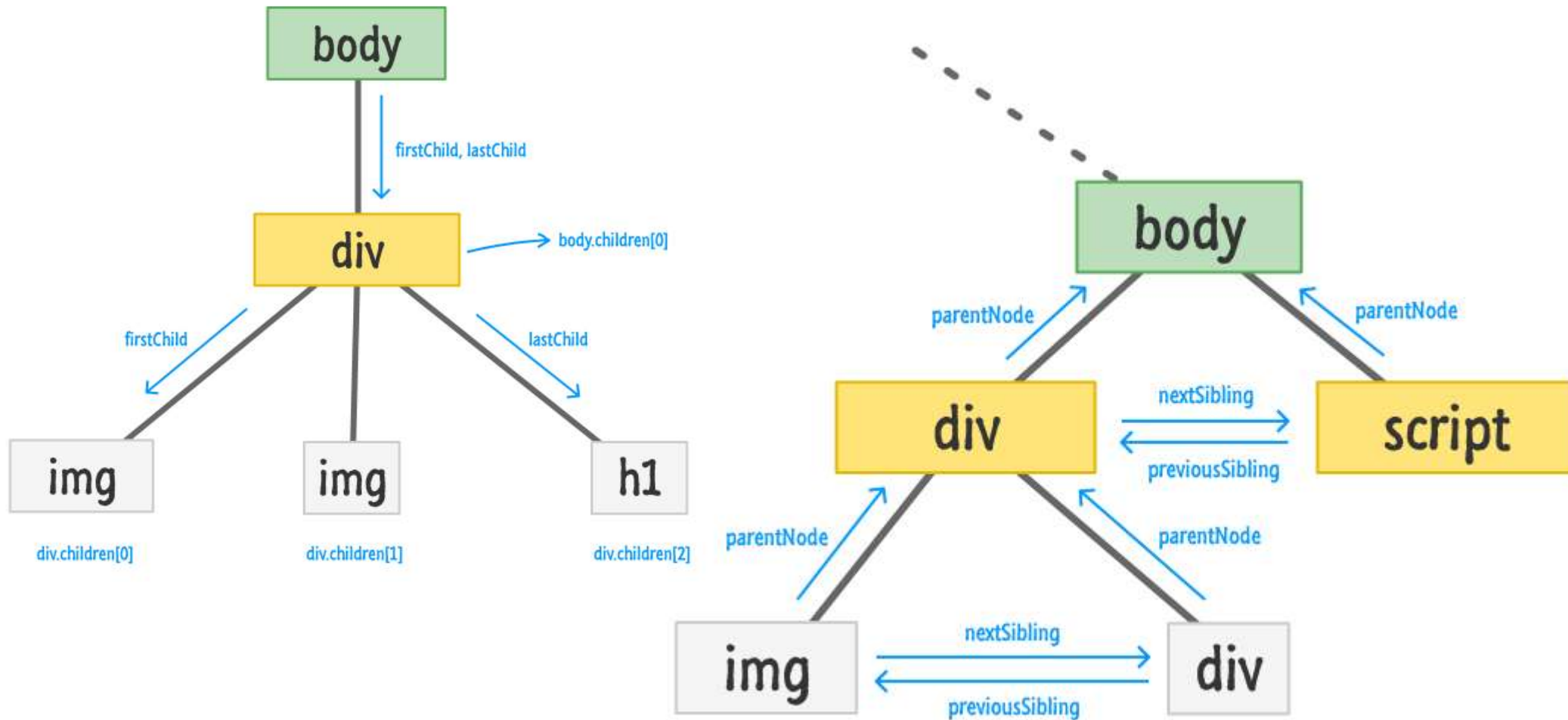
Document Object Model

Accessing Elements in DOM

Access Element By	Equivalent Selector	Method
ID	#demo	getElementById("demo")
Class	.demo	getElementsByClassName("demo")
Tag	<tag name> like p	getElementsByTagName("p")
Selector (single)	Any CSS Selector	querySelector("selector")
Selector (all)		querySelectorAll("selector")

Document Object Model

Traversing the DOM



Document Object Model

Creating Element Objects

Method	Description
<code>document.createElement()</code>	Create a new element node using tag
<code>document.createTextNode()</code>	Create a new text node

Property	Description
<code>node.textContent</code> or <code>node.innerText</code>	Get or set the text content of an element node (without HTML tags)
<code>node.innerHTML</code>	Get or set the HTML content enclosed in the element tag

Document Object Model

Manipulating Nodes in the DOM

Method	Description
node.appendChild()	Add a node as the last child of the parent element.
node.insertBefore()	Insert a node into the parent before a specific sibling node
node.replaceChild()	Replace an existing node with a new node
node.removeChild()	Removes child node
node.remove()	Removes a node

* **node** here can be document.body or any existing element in the DOM



THANK YOU

Vinay Joshi

Department of Computer Science and Engineering

vinayj@pes.edu

+91 80 2672 6622